

Curtis relates to a bone anchor which comprises an expanding element. There is no interference screw in the Curtis device. As amended, claim 1 is limited to an apparatus "for augmenting an interference screw fixation", language suggested by the Examiner and for which Applicant is most appreciative. Claim 1 is further limited to an interference screw fixation wherein the interference screw engages a wall of the bone tunnel and engages the ligament in the bone tunnel. Claim 1 is still further limited to a jamming retainer adapted to be engaged by the interference screw to prevent proximal migration of the jamming retainer. It appears that, as amended, claim 1 stands well clear of the teachings of Curtis and should be deemed allowable thereover.

Claims 3, 12 and 13-18 stand rejected on the same grounds as claim 1, i.e., anticipated by Curtis et al. All of these claims depend directly or ultimately from claim 1 and would appear to be allowable over Curtis, at least by way of dependency. In addition, claim 15 is limited to the jamming retainer bore and the suture retainer being configured to bind suture therebetween, a feature which does not appear to be present in Curtis. Accordingly, it appears that claim 15 is allowable in its own right, as well as through dependency.

Claim 1 stands further rejected under 35 USC 102(e) as anticipated by Boucher et al. Boucher discloses in Fig. 12 a fixation assembly including a wedge 116 and an interference screw 152. As amended, claim 1 is directed to apparatus for augmenting an interference screw fixation wherein the interference screw engages a wall of the bone tunnel and engages the ligament in the bone tunnel. It appears that the Boucher device uses the wedge 116 for engaging the ligament 78, rather than utilizing the screw 152 to engage the ligament. Further, claim 1 is limited to the jamming retainer being disposed distally of the ligament. In Boucher, the ligament and wedge extend substantially parallel in side-by-side relationship. Accordingly, it appears clear that the invention defined by amended claim 1 is not anticipated by Boucher and, it is believed, not rendered obvious by Boucher.

Claims 9-11 stand rejected on the ground of anticipation by Boucher. Claim 9-11 depend directly or ultimately from claim 1 and also would appear to be allowable, at least through dependency.

Claim 1 stands further rejected under 35 USC 102(e) as anticipated by Beck, Jr. et al. As in Boucher, the Beck interference screw fails to contact the ligament, and the jamming retainer is not disposed distally of the ligament but, rather, side-by-side. In view thereof, claim 1 does not appear to be

anticipated by Beck and, it is believed, not rendered obvious by Beck.

Claims 3, 4, 6 and 8-11 stand rejected as anticipated by Beck. These claims depend directly or ultimately from claim 1 and also appear to be allowable, at least through dependency.

Claims 18-24 have been rejected as anticipated by Beck. Claim 18 has been canceled. Claim 46 has been added and is an independent method claim. Claim 46 includes as steps, "placing the jamming retainer and the ligament in the bone tunnel with the jamming retainer disposed distally of the ligament" and "inserting the interference screw into the bone tunnel, the interference screw engaging a wall of the bone tunnel and engaging the ligament in the bone tunnel to effect fixation of the ligament in the bone tunnel". Neither step appears to be present in Beck, nor suggested thereby. Accordingly, claim 46 should be deemed not anticipated by Beck and, further, not taught or suggested by Beck.

Claims 19-23, 47 and 48 depend directly or ultimately from claim 46 and would also appear to be allowable, at least through dependency.

Claim 7 stands rejected under 35 USC (a) as unpatentable over Beck. Claim 7 depends from claim 1. As noted above, claim 1 distinguishes from Beck by virtue of being limited to

augmenting an interference screw fixation wherein the interference screw engages a wall of the bone tunnel and engages the ligament in the bone tunnel, and by virtue of being limited to the jamming retainer being adapted for disposition in the bone tunnel distally of the ligament. In view thereof, claim 7 would appear to distinguish over Beck.

Claims 4-6, 14 and 21 stand rejected under 35 USC 103(a) as unpatentable over Curtis in view of Pierce. Claims 4-6 and 14 depend directly or ultimately from claim 1. As noted above, claim 1 stands clear of Curtis in several aspects, namely, claim 1 is limited to (1) apparatus for augmenting an interference screw fixation, (2) the interference screw engages the ligament, and (3) the jamming retainer is adapted to be engaged by the interference screw to prevent proximal migration of the jamming retainer. Pierce does not appear to provide the components missing from Curtis. Accordingly, it appears that claims 4-6 and 14 should not be deemed obvious relative to Curtis and Pierce.

Finally, claim 21 stands rejected under 35 USC 103(a) as unpatentable over Curtis in view of Pierce. Claim 21 depends from claim 46 which sets forth a method including the steps of "providing an assembly comprising an interference screw and a jamming retainer", "connecting the jamming retainer to the ligament at a distal end of the ligament", "placing the jamming

retainer and the ligament in the bone tunnel with the jamming retainer disposed distally of the ligament", "inserting the interference screw into the bone tunnel, the interference screw engaging a wall of the bone tunnel and engaging the ligament", and "the interference screw further engaging the jamming retainer in the bone tunnel". Neither Curtis nor Pierce discloses or suggests such a sequence of steps. In view thereof, claim 21 would appear to be readily allowable.

Claim 29 is a new claim relating to an assembly for fixation of a ligament in a bone tunnel. The assembly includes the interference screw as a component thereof in combination with the jamming retainer. Claims 30-44 depend directly or ultimately from claim 29.

Claim 45 is a new claim relating to a graft ligament assembly including an interference screw and a jamming retainer in combination with a graft ligament.

In view of the amendments and remarks hereinabove, it appears that claims 1, 3-17, 19-23 and 29-48 are in condition for allowance, which action is most respectfully requested.

Respectfully submitted,

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